

REMARKS

Examiners Balsis and Spisich are thanked for the courtesies extended to the undersigned during an interview on June 10, 2004. During the interview, the differences between the prior art and the toothbrush recited in the pending claims, as well as potential amendments to the claims, were discussed. It was agreed in the interview that the rejections based on U.S. Patent No. 6,220,673 to Russell et al. (Russell) (commonly assigned to Colgate-Palmolive Company along with the present application and having common inventorship with the present application) were improper, as the filing date of Russell is less than one year prior to the filing date of the present application.

The Office Action of February 13, 2004 has been reviewed and these remarks are responsive thereto. Claims 1-10 are pending in this application. By this Amendment, Fig. 3 has been amended and amendments to the specification have been made in concert with the modification to Fig. 3. Support for the amendments can be found in the application as originally filed. Reconsideration and allowance of the pending claims are respectfully requested.

Drawing Objections

The Office Action objected to the drawings for failing to show three preformed components welded together in accordance with claim 7. Fig. 3 has been amended to include reference numeral 30 to an elastomeric component, which "may be weld by the method of the present invention to the head 10 and handle 12" Specification, page 11, lines 29-30. The specification has also been amended to include reference numeral 30 and to correct minor typographical errors. Support for the amendments may be found in the application as originally filed at least at page 10, line 25 to page 11, line 2 of the specification and in claim 7. Accordingly, Applicants respectfully request reconsideration and withdrawal of this objection.

Claim Rejections – 35 USC § 102

Claims 1 and 5 stand rejected under 35 USC § 102(b) as being anticipated by Russell. As discussed in the interview, this rejection is improper, because Russell issued less than one year prior to the filing date of the present application. In addition, the inventors of Russell are the

same as for the present application. Accordingly, Applicants respectfully request that these rejections to claims 1 and 5 be reconsidered and withdrawn.

Claims 1 and 5 stand rejected under 35 USC § 102(b) as allegedly being anticipated by U.S. Patent No. 6,066,282 to Kramer (Kramer). Applicants respectfully traverse this rejection.

The Office Action asserts that Kramer teaches a toothbrush manufactured from two preformed components (1,7) that are welded together, and refers to col. 2, lines 58-68 of Kramer for support of this assertion. This assertion, however, is incorrect, as Kramer teaches a process of making a toothbrush by forming or molding a second component such that it engages a first preformed component. In other words, Kramer teaches *forming a second component* (not a preformed component) such that it engages *a first preformed component*. It further teaches connecting two components without a weld, and then forming a flexible link around the connection. However, Kramer does not teach or suggest a toothbrush formed from at least *two preformed* components that are *welded together*.

In particular, Kramer discloses a first embodiment in which first and second engagement parts are fixed together “by the *formation* of the second engagement part *by a moulding process* that creates a weld between the first and second engagement parts.” Emphasis added. Kramer, column 2, lines 63-65. Kramer clearly teaches attaching the second engagement part (head or neck) to the first engagement part by molding it to the first engagement part. Thus, only one *preformed* component exists prior to being welded to another component, which is being formed (molded) as it bonds to the preformed component.

Kramer also discloses an alternative embodiment in which first and second engagement parts are connected “by the formation of the second engagement part by a moulding process that creates *no weld* between the first and second engagement parts.” Emphasis added. Kramer, col. 2, lines 44-46. Kramer teaches that these connected, unwelded parts may be surrounded by an elastomeric mass, but it does not teach welding the parts together via the mass. In particular, Kramer teaches that in a subsequent injection molding process, “an elastomeric mass 9 may be caused to fuse with the plastics material of the head 1” and the connection with the neck. Kramer, col. 5, lines 51-54. However, Kramer does not teach or suggest that the elastomeric mass of the further molding process welds the neck to the head. On the contrary, rather than welding the two components together, Kramer teaches that the “surrounding mass 9 of

elastomeric material can help to control the *flexibility of this joint* [between the head and neck]" (Emphasis added, Kramer, col. 5, line 67 to col. 6, line 1), rather than fixedly welding the head to the neck.

In contrast with Kramer, claim 1 recites a toothbrush "formed from at least two *preformed* toothbrush components, which are *welded together*" Emphasis added. As discussed above, Kramer does not teach or suggest welding together two preformed toothbrush components. Accordingly, Applicants respectfully submit that claim 1, and claim 5 depending therefrom, are not anticipated by Kramer.

Claim Rejections – 35 USC § 103

Claims 1, 2-4, 6, 9 and 10 stand rejected under 35 USC § 103(a) based on Russell, either alone or in combination with U.S. Patent No. 6,682,620 to Gartland (Gartland) or European Patent No. EP 0557537 to Bonfiglio (Bonfiglio). As agreed to in the interview and discussed above, rejections based on Russell are improper. Accordingly, Applicants respectfully request that these rejections be reconsidered and withdrawn.

Claims 2-4 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Kramer in view of Gartland. Applicants respectfully traverse these rejections. As discussed above, Kramer does not teach or suggest welding together two preformed toothbrush components as recited in claim 1. Gartland does not overcome the deficiencies of Kramer with respect to claim 1. Accordingly, Applicants respectfully submit that claims 2-4, which depend from claim 1, are allowable over Kramer in view of Gartland.

Claims 7 and 8 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Bonfiglio in view of U.S. Patent No. 759,490 to Yates (Yates). Applicants respectfully traverse these rejections.

Claims 7 and 8 depend from claim 1, which recites, in part, "a toothbrush formed from at least two preformed components, which are welded together to form a toothbrush having acceptable peel resistant strength." Claim 7 additionally recites that three preformed components are welded together, and claim 8 further recites that at least one of the three preformed components is elastomeric. Neither Bonfiglio nor Yates teach or suggest a toothbrush as recited

in these claims, and there clearly is no motivation to combine the references. Further, it is entirely unclear how they could be combined to provide the invention recited in claims 7 and 8.

Bonfiglio was relied upon in the Office Action for its teaching of plastics welding. Clearly, the process taught in Bonfiglio is not applicable to non-plastic, rigid substances, such as wood or metal, as it relies upon softening the plastics to their melting points that are to be joined. Yates was relied upon for its teaching of a three part toothbrush including a head, neck and handle. However, Yates clearly contemplates the use of rigid materials, such as bone or wood, for its head and handle portions rather than plastic materials. There is no motivation to combine these references nor is it clear how the teachings of either reference could modify the other to provide the claimed invention.

As a possible motivation to combine the references, the Office Action appears to rely upon a sentence in Yates at col. 2, lines 83-86 which states, “[t]he flexible neck should be securely joined or united to the back and handle, and this may be done in any well-known manner.” However, Yates teaches mechanical connections between toothbrush components made of “bone, wood and the like,” which apparently was the state of the art when it issued in 1902. In particular, Yates states, “[t]ooth-brushes as at present constructed, so far as known to me, are provided with a back and a handle formed from substantially rigid material – such as bone, wood, and the like.” Yates, col. 1, lines 7-10. While describing his toothbrush, Yates states that the handle and bristle-containing portion may be made of any well-known material, which he identified as rigid materials such as bone and wood, (*see*, Yates, col. 2, lines 55-62), whereas the neck “is made from flexible material – such, for example, as rubber.” Yates, col. 2, lines 65-66. Yates does not teach or suggest that the handle or neck could also be made of flexible material. Further, Yates discloses mechanical connections between the neck and the handle or the head and does not suggest that the joined connection between the neck and back or handle could be a welded connection of plastics. Also, there is no teaching or suggestion in Yates to modify its rigid, mechanically-connected toothbrush construction in accordance with the plastics welding teachings of Bonfiglio.

Further, Yates does not suggest the desirability for connecting its rigid head and handle components to the neck using the plastics welding teachings of Bonfiglio. Assuming the toothbrush of Yates could be modified according to the teachings of Bonfiglio, it is well

grounded that the mere possibility that the prior art could be so modified does not make the modification obvious "unless the prior art suggested the desirability of such a modification." *In re Brouwer*, 77 F.3d 422 (Fed. Cir. 1996). Clearly, Yates does not suggest the desirability for a plastic component toothbrush having welded connections.

Moreover, Bonfiglio, which the Office Action applies as a primary reference, does not teach or suggest the use of its plastics welding method for toothbrushes or for providing the recited toothbrush peel strength. In addition, it is entirely unclear how the plastics welding method of Bonfiglio could be modified using the toothbrush of Yates to provide the claimed invention. Similarly, it is entirely unclear how the toothbrush of Yates could be modified using the plastics welding method of Bonfiglio to provide the claimed invention.

Accordingly, Applicants respectfully submit that claims 7 and 8 are allowable over Bonfiglio in view of Yates.

Based on the foregoing, Applicants respectfully submit that the application is in condition for allowance and a Notice to that effect is earnestly solicited. Should the Examiner believe that anything further is desirable in order to place the application in even better form for allowance, the Examiner is respectfully urged to contact Applicants' undersigned representative at the below-listed number.

Respectfully submitted,

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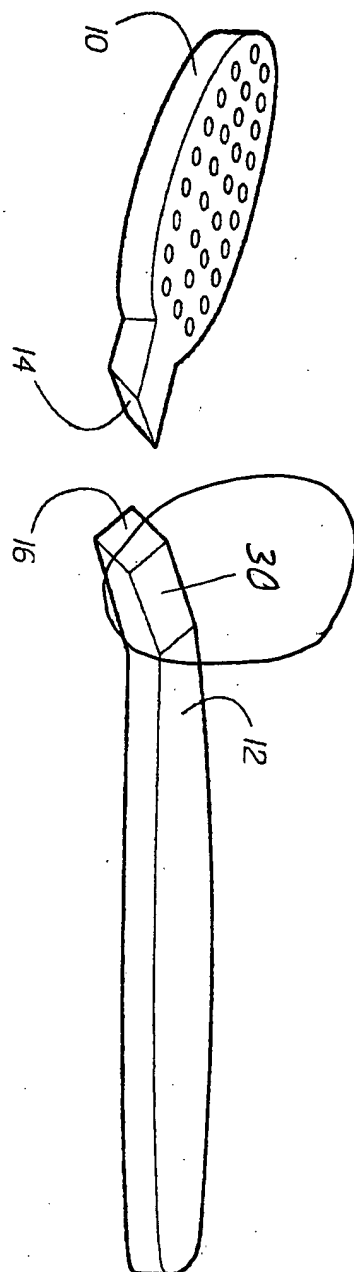


FIG. 3

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